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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,152	10/27/2003	Michael J. Sadar	100-86	5363

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EXAMINER

MERLINO, AMANDA H

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/694,152

Applicant(s)

SADAR, MICHAEL J.

Examiner

Amanda H. Merlino

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5-9, and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-9, and 11-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 103***

Claims 1-3, 5, 7-9, 11, and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over by Banerjee (6,307,630) in view of Goto et al (JP 02088944). With regard to claim 1, Banerjee teaches of a monitoring system for monitoring a parameter such as turbidity (claim 5) of a fluid in accordance with figures 1, 2 and 3 comprising a sample cell (16), said sample cell having inlet means communication with said fluid and having outlet means for enabling fluid to exit sample cell (1) (col 3; lines 35-38), light source means (100) for providing a collimated light beam, a detector means (200), a first fiber optic cable (102) for transmitting said light beam to said sample cell (1) where said light beam is directed into said fluid and a signal is created corresponds to said turbidity, a second fiber optical cable (202) for transmitting said signal to said detector means (200), and a means for measuring variability of said parameter (300). Banerjee further teaches of a plurality of sample cells (1-16) wherein each of said sample cells are associated with a pair of fiber optical cables (figure 7 and col 4; lines 55-58) (claim 2), a single light source means and a single detector means (figure 7 and col 4; lines 55-58 and col 5; lines 1-2), a means for selectively positioning (150) said light source and detector means in relation to said fiber optical cables (claim 3), and wherein light source means comprising a laser (col 3; lines 58-59) (claim 4).

With regard to claim 7, all the limitations are met by the rejection above.

With regard to claim 8, Banerjee teaches of a plurality of filter modules for filtering water (col 1; lines 23-28 and lines 56-59) wherein the output of each of said filter modules is a stream of drinking water and wherein said inlet means of said sample cells communicates with the output of one said filter modules.

With regard to claim 9-11 and 13, all the limitations are met by the rejection above.

Banerjee lacks the teaching of computing the relative standard deviation of the parameter (turbidity).

Goto et al teaches the computation of the relative standard deviation of the measured parameter (turbidity).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to measure the relative standard deviation of the parameter (turbidity) measured by Banerjee in order to quantify the precision of the measurement. It is well known in the art that the relative standard deviation is useful in accessing the precision of the measurements which would aid in determining the accuracy and precision of the measuring system (i.e. calibration).

Claims 6, 12, and 14 rejected under 35 U.S.C. 103(a) as being unpatentable over by Banerjee (6,307,630) in view of Goto et al (JP 02088944) as applied to claims 1-3, 6-9, 11 and 13 above, and further in view of Sadar (5,747,667).

Banerjee and Goto et al lacks the teaching of particle counting.

Sadar teaches of particle counting for water treatment (e.g., to monitor filter efficiency).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to use particle counting as taught by Sadar instead of measuring turbidity as taught by Banerjee since particle counting is another well known method to monitor filter breakthrough (col 1; lines 17-20) to measure water quality. Sadar specifically teaches that particle counting does not only count but sizes the particle, which would provide additional information such as types of pathogens in the water, which would provide a more versatile apparatus.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-3, 5-9, and 11-14 have been considered but are moot in view of the new ground(s) of rejection.

### **Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

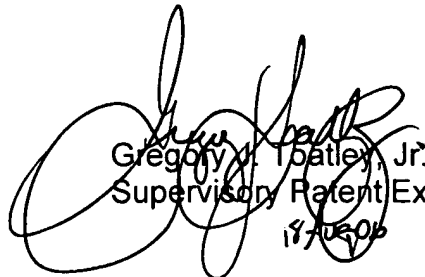
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda H. Merlino whose telephone number is 571-272-2421. The examiner can normally be reached on Monday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on 571-272-2800 ext 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Amanda H Merlino   
Patent Examiner  
Art Unit 2877  
August 14, 2006

  
Gregory J. Toatley, Jr.  
Supervisory Patent Examiner  
18 AUG 2006